



SCHUMACHER et al., Ser. No. 09/647,047

CLAIMS 22 - 29 (ALL CLAIMS IN THE CASE)

Claims 11, 12, 14, 16-19 and 21 are canceled.

22. (newly added) A reactor for the catalytic oxidation of ammonia to nitrogen oxides, which contains a noble metal gauze catalyst and a heat exchanger in that order in the direction of flow and has a catalyst for the decomposition of N_2O located between the noble metal gauze catalyst and the heat exchanger, wherein the catalyst for the decomposition of N_2O is installed as a fixed bed having a height of from 5 -10 cm and wherein said reactor provides for a residence time over the catalyst for the decomposition of N_2O of less than 0.05 s.
23. (newly added) A reactor as claimed in claim 22, wherein a noble metal recovery gauze is located between the noble metal gauze catalyst and the catalyst for the decomposition of N_2O .
24. (newly added) A reactor as claimed in claim 22, wherein the catalyst for the decomposition of N_2O is prepared by combining $CuAl_2O_4$ with tin, lead an/or an element of main group II or transition group II of the Periodic Table of the Elements as oxide or salt or in elemental form and subsequently calcining the mixture at from 300 to 1300°C and a pressure in the range from 0.1 to 200 bar.
25. (newly added) An apparatus as claimed in claim 22, further comprising a reduction unit for the selective catalytic reduction of nitrogen oxides.
26. (newly added) A process for the catalytic decomposition of N_2O in a gas mixture obtained in the preparation of nitric acid by catalytic oxidation of ammonia, where the N_2O is decomposed catalytically over a catalyst for the decomposition of

N_2O , wherein the hot gas mixture obtained from the catalytic oxidation of ammonia is brought into contact with the catalyst for the decomposition of N_2O prior to subsequent cooling, wherein the residence time over the catalyst for the decomposition of N_2O is less than 0.05 s.

27. (newly added) A process as claimed in claim 26, wherein the decomposition of N_2O is carried out at from 600 to 950°C and/or at a pressure in the range from 1 to 15 bar.

28. (newly added) A process as claimed in claim 26, wherein the catalyst for the decomposition of N_2O is prepared by combining $CuAl_2O_4$ with tin, lead and/or an element of main group II or transition group II of the Periodic Table of the Elements as oxide or salt or in elemental form and subsequently calcining the mixture at from 300 to 1300°C and a pressure in the range from 0.1 to 200 bar.

29. (newly added) The process of claim 26, wherein the residence time over the catalyst for the decomposition of N_2O is 0.03 s.

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IN THE CLAIMS

Cancel claims 11, 12, 14, 16-19 and 21. Add new claims 22-29 as shown on the attached sheets. (Support for claim 29 is found in example 1, as discussed infra.)